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10/541,218

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EXAMINER

KEATON, SHERROD L

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/541,218	<b>Applicant(s)</b> MATSUURA ET AL.	
	<b>Examiner</b> Sherrod Keaton	<b>Art Unit</b> 2175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-21 and 23-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-21 and 23-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This action is in response to the RCE filing of 6-25-08. Claims 1-6, 8-21 and 23-27 are pending and have been considered below:

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 18-21 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorvari et al ("Sorvari" US 20040043758 A1) in view of Applicants Admitted Prior Art ("AAPA") and Rankin et al ("Rankin" US 6879838 B2).

**Claims 1, 19 and 27:** Sorvari discloses a prediction method, terminal and program by which a mobile terminal predicts web applications a user is likely to use, with a location detecting step of detecting a location where the mobile terminal exists, a usage history creating step of creating a usage history in association with the location and the

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predicting step which presents prediction results (Page 4, Paragraph 59; Page 8, Paragraph 93; Page 6, Paragraphs 79 and 80).

However Sorvari does not explicitly disclose a mobile with programs installed and an application executing step of selecting and executing an application program installed in the mobile terminal. However AAPA discloses applications installed on a mobile terminal and executing those applications (Page 1, Paragraph 2-8). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to also employ the applications and executing of the AAPA and use the prediction method of Sorvari. One would have been motivated to provide the applications for prediction analysis to improve the functionality of the mobile terminal.

Nor does Sorvari explicitly disclose wherein the predicting step includes a future location predicting step of predicting a future location of a mobile terminal, a specifying step of specifying, based on the usage history, an application program corresponding to the future location predicted in the future location predicted in the future location predicting step, and a presenting step of presenting the application program specified in the specifying step as a prediction result of an application program that the user is likely to use in the future. However Rankin discloses a location based service system and further discloses a predicting future application based on the location and what may be used (Column 8, Lines 40-46). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include the future predicting step in the modified Sorvari as taught by Rankin. One would have been motivated to add this

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future prediction step to maximize the effectiveness of system when trying to provide the user with pertinent location-based information.

**Claims 2 and 20:** Sorvari, AAPA and Rankin disclose an application program prediction method as in claim 1 above, and Sorvari further discloses wherein the predicting step further includes: a current location detecting step of detecting a current location of the mobile terminal a current application specifying step specifying, based on the usage history an application program corresponding to the current location detected in said current location detecting step; and a current application presenting step presenting the application program specified in said specifying step, the current application specifying step as a prediction result of an application program that the user is likely to use currently (Sorvari, Page 4, Paragraph 59; Page 8, Paragraph 93; Page 6, Paragraphs 79 and 80). Application program is provided by AAPA.

**Claims 3 and 21:** Sorvari, AAPA and Rankin disclose an application program prediction method as in claim 2 above, and further disclose usage history creating step, the usage history is created, the usage history including a name of the application program executed in the application executing step and a content for the application program inputted by a user's operation the specifying step, a current application specifying step, a content corresponding to the current location detected in said current location

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detecting step is further specified based on the usage history, and in the current application presenting step, the content specified in the current application specifying step is further presented as a content of the application program that the user is likely to use currently. (Sorvari Page 4, Paragraph 59; Page 8, Paragraph 93; Page 6, Paragraphs 79 and 80). Application program is provided by AAPA.

**Claims 18 and 26:** Sorvari, AAPA and Rankin disclose an application program prediction method as in claims 1 and 19 above, and further disclose: a mode setting step of setting an operation mode of the mobile terminal; a setting location detecting step of detecting a location of the mobile terminal where the operation mode is set in the mode setting step a setting history creating step of creating a setting history of the operation mode set in the mode setting step, in association with the location detected in said setting location detecting step; and a mode predicting step of specifying an operation mode corresponding to a current location of the mobile terminal based on the setting history, and presenting the set operation mode as a prediction result (Sorvari Page 4, Paragraph 59; Page 8, Paragraph 93; Page 6, Paragraphs 79 and 80). Application program is provided by AAPA.

3. Claims 4-6 rejected under 35 U.S.C. 103(a) as being unpatentable over Sorvari et al ("Sorvari" US 20040043758 A1) in view of Applicants Admitted Prior Art (AAPA)

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and Rankin et al ("Rankin" US 6879838 B2) as applied to claim 3 above, and further in view of Gong (20030163311 A1).

**Claim 4:** Sorvari, AAPA and Rankin disclose an application program prediction method as in claim 3 above, but does not explicitly disclose the current application specifying step, when an e-mail is specified as an application program corresponding to the current location detected in the current location detecting step, and in the current application presenting step, a prediction result is presented, the prediction result indicating that the e-mail is specified as the application program that the user is likely to use currently. However Gong discloses an intelligent social agent and further discloses the launch of an email for a user (Page 4, Paragraph 37). AAPA discloses starting up possible applications. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include email as a predicted application in the modified Sorvari as taught by Gong. One would have been motivated to launch email to provide important everyday applications that the user may find useful.

**Claim 5:** Sorvari, AAPA, Rankin and Gong disclose an application program prediction method as in claim 4, and Gong further discloses wherein in the current application specifying step, a destination of the e-mail is specified as a content corresponding to the current location detected in the current location detecting step, and in the current application presenting step, the destination is presented (Page 2, Paragraph 26).

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**Claim 6:** Sorvari, AAPA, Rankin and Gong disclose an application program prediction method as in claim 5, and Gong further discloses wherein in the current application specifying step, a template of a text of the e-mail is specified as a content corresponding to the current location detected in the current location detecting step, and in the current application presenting step, the template is presented (Page 2, Paragraph 26).

4. Claims 16 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorvari et al ("Sorvari" US 20040043758 A1) in view of Applicants Admitted Prior Art (AAPA) and Rankin et al ("Rankin" US 6879838 B2) as applied to claims 1 and 19 above, and further in view of Pearce (5754125).

**Claims 16 and 24:** Sorvari, AAPA, Rankin and Pearce disclose an application program prediction method as in claims 1 and 19 above, wherein the future location predicting step includes: a station specifying step of specifying a station where the mobile terminal currently exists, through communication carried out between the mobile terminal and a device placed in the station; and a retrieving step of retrieving, from a past route search result, an arrival station corresponding to a departure station that is the station specified in the station specifying step, and the arrival station retrieved in the retrieving step is regarded as the future location of the mobile terminal. Pearce further



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discloses a unit using a location system looking at when the position and velocity were generated and predicting a position based on the movements (Page 3, Lines 1-30).

Therefore it would have been obvious to having ordinary skill in the art at the time of the invention to check base location and predict an arrival area in the modified Sorvari as taught by Pearce. One would have been motivated to use the base location to provide a definite location parameter when calculating prediction results this allows the system to produce more accurate results.

5. Claims 8, 9, 14, 15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorvari et al ("Sorvari" US 20040043758 A1), Applicants Admitted Prior Art (AAPA), Rankin et al ("Rankin" US 6879838 B2) and Pearce (5754125) as applied to claims 7 and 19 above, and further in view of Horvitz (20030014491 A1).

**Claims 8 and 23:** Sorvari, AAPA, Rankin and Pearce disclose an application program prediction method as in claim 1 and 19 above, but do not explicitly disclose comprising a movement history creating step of creating a movement history of the mobile terminal in association with a calendar attribute, wherein in the future location predicting step, a location corresponding to a calendar attribute indicating a time later than a current time is specified based on the movement history, and the specified location is regarded as a future location of the mobile terminal. However Horvitz discloses a method and

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application of learning and inferring the periods of time and further discloses a calendar system, which takes notes and tries to forecast location and available time openings with accordance with the calendar (Page 3, Paragraph 33). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide calendar forecast in the modified Sorvari as taught by Horvitz. One would have been motivated to provide the calendar forecast in order relate functions with predetermined events improving the prediction calculation.

**Claim 9:** Sorvari, AAPA, Pearce, Rankin and Horvitz disclose an application program prediction method as in claim 8 above, wherein discloses the usage history creating step, the usage history is created, the usage history including a name of the application program executed in the application executing step and a content for the application program inputted by a user's operation, and discloses the specifying step, a content corresponding to the future location predicted in the future location predicting step is further specified based on the usage history, and in the presenting step, the content specified in the specifying step is further presented as a content of the application program that the user is likely to use in the future (Pearce: Column 2, Lines 1-7).

**Claim 14:** Sorvari, AAPA, Pearce, Rankin and Horvitz disclose an application program prediction method as in claim 8, wherein in the future location predicting step, a location at which the mobile terminal existed with the most frequency is specified based on the movement history, from among locations associated with the calendar attributes

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indicating the times later than the current time. Pearce also discloses the prediction based speed and direction movement (Page 2, Lines 1-7) and Horvitz discloses a using GPS in reference to time of day or a day of the week (Page 8, Paragraph 71).

**Claim 15:** Sorvari, AAPA, Pearce, Rankin and Horvitz disclose an application program prediction method as in claim 8, wherein in the future location predicting step, a location to which the mobile terminal moved next with the most frequency, starting from the current location and the current time indicated by a current calendar attribute, is specified based on the movement history. Pearce also discloses the prediction based speed and direction movement and looks at possible other locations if the predicted location passes the predetermined limit (Page 2, Lines 1-20) and Horvitz discloses a using GPS in reference to time of day or a day of the week (Page 8, Paragraph 71).

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sorvari et al ("Sorvari" US 20040043758 A1), Applicants Admitted Prior Art (AAPA), Rankin et al ("Rankin" US 6879838 B2), Pearce (5754125) and Horvitz (20030014491 A1) as applied to claim 9 above, and further in view of Duley (5459671).

**Claim 10:** Sorvari, AAPA, Pearce, Rankin and Horvitz disclose an application program prediction method as in claim 9 above however do not explicitly disclose a power detecting step of detecting a remaining amount of power of the mobile terminal; a

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calculating step of calculating an amount of power which is to be consumed when the application program and the content specified in the specifying step are used; and a message presenting step of presenting a message prompting to charge when the remaining amount of power detected in the power detecting step is smaller than the amount of power consumption calculated in the calculating step. However Duley discloses a programmable battery controller and further discloses power monitoring and display of warning messages (Column 4, Lines 9-21; Column 5, Lines 39-50). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include power monitoring and alert messages in the modified Sorvari as taught by Duley. One would have been motivated to have power management functions to improve user operability of the system and not have terminal stop working in the middle of an application.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sorvari et al ("Sorvari" US 20040043758 A1), Applicants Admitted Prior Art (AAPA), Rankin et al ("Rankin" US 6879838 B2), Pearce (5754125), Horvitz (20030014491 A1) and Duley (5459671) as applied to claim 10 above, and further in view of Salmimaa et al (20020160817).

**Claim 11:** Sorvari, AAPA, Rankin, Pearce, Horvitz and Duley disclose an application program prediction method as in claim 10 above but do not explicitly disclose: a sending step of sending current location information indicating a current location of the mobile

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terminal to a predetermined apparatus via a communication network; an obtaining step of obtaining, from the predetermined apparatus, charging place information indicating a place where the mobile terminal can be charged, in the vicinity of the location indicated in the current location information; and a charging place presenting step of presenting the charging place based on the charging place information obtained in the obtaining step. However Salmimaa discloses a method and apparatus for displaying prioritized icons in a mobile display and further discloses displaying places of importance (e.g. gas stations or charging station) in reference to a geographical region (Page 1, Paragraph 9; Page 4, Paragraph 44). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to inform the user of possible places of interest such as charging location in the modified Sorvari as taught by Salmimaa. One would have been motivated to have this location information to tailor to the terminals specific needs for charging arrangements.

8. Claim 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Sorvari et al ("Sorvari" US 20040043758 A1), Applicants Admitted Prior Art (AAPA), Rankin et al ("Rankin" US 6879838 B2), Pearce (5754125) and Horvitz (20030014491 A1) as applied to claim 9 above, and further in view of Cantos (6529784 B1).

**Claim 12:** Sorvari, AAPA, Rankin, Pearce and Horvitz disclose an application program prediction method as in claim 9 above however do not explicitly disclose wherein the content is distribution data to be distributed via a communication network, and the

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application program prediction method further comprises: a judging step of judging whether or not the mobile terminal holds a latest version of the distribution data specified in the specifying step; and a presenting step of presenting a message for notifying that the mobile terminal does not hold the latest version of the distribution data, when it is judged in the judging step that the mobile terminal does not hold the latest version. However Cantos discloses a system for monitoring computer systems and further discloses a system determining if a new package is available to the system and sending message that a package is available (Column 6, Lines 13-25). Therefore it would have been obvious to one having ordinary in the art at the time of the invention to have alerts for possible upgrades of the system in the modified Sorvari as taught by Cantos. One would have been motivated to have the alerts because they are a quick and efficient way to notify the user of needed system changes.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sorvari et al ("Sorvari" US 20040043758 A1), Applicants Admitted Prior Art (AAPA), Rankin et al ("Rankin" US 6879838 B2), Pearce (5754125), Horvitz (20030014491 A1) and Cantos (6529784 B1) as applied to claim 12 above, and further in view of Salmimaa et al (20020160817).

**Claim 13:** Sorvari, AAPA, Rankin, Pearce, Horvitz and Cantos disclose an application program prediction method according to claim 12, further comprising: a sending step of sending current location information indicating a current location of the mobile terminal

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to a predetermined apparatus via a communication network; an obtaining step of obtaining, from the predetermined apparatus, obtainment place information indicating a data obtainment place where the mobile terminal can obtain the latest version of the distribution data, in the vicinity of the location indicated in the current location information; and an obtainment place presenting step of presenting the data obtainment place based on the obtainment place information obtained in the obtaining step.

However Salmimaa discloses a method and apparatus for displaying prioritized icons in a mobile display and further discloses displaying places of importance (e.g. Help Areas or Product sales stores) in reference to a geographical region (Page 1, Paragraph 9; Page 4, Paragraph 44). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to inform user of possible places of interest such as store or area to get an update in the modified Sorvari as taught by Salmimaa. One would have been motivated to have this location information to tailor to the terminals specific need to update the software of the device.

10. Claims 17 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorvari et al ( "Sorvari" US 20040043758 A1), Applicants Admitted Prior Art (AAPA), Rankin et al ("Rankin" US 6879838 B2) and Pearce (5754125) as applied to claims 7 and 22 above, and further in view of Gong (20030163311 A1).

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**Claims 17 and 25:** Sorvari, AAPA, Rankin and Pearce disclose an application program prediction method as in claims 1 and 19 above, but do not explicitly disclose wherein the future location predicting step includes: a route specifying step of specifying a route on which the station where the mobile terminal currently exists is located, through communication carried out between the mobile terminal and a device placed in the station; and a retrieving step of retrieving, from a past e-mail history, a station which is located on the route specified in the station specifying step, and the station retrieved in the retrieving step is regarded as the future location of the mobile terminal. However Gong discloses an intelligent social agent extracts information about the user from context, which includes email to determine possible location (Page 2, Paragraph 26; Page 3, Paragraph 29). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to use email history in helping predict location in the modified Sorvari as taught by Gong. One would have been motivated to use email history to provide a definite location parameter when calculating prediction results this allows the system to produce more accurate results.

### ***Response to Arguments***

11. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.



### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherrod Keaton whose telephone number is 571) 270-1697. The examiner can normally be reached on Mon. thru Fri. and alternating Fri. off (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Bashore can be reached on 571-272-4088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3800.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SLK

9-22-08

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Supervisory Patent Examiner, Art Unit 2175